DIACETONE ALCOHOL

1. CORRECTIVE RESPONSE ACTIONS
   - Dilute and disperse
   - Stop discharge

2. CHEMICAL DESIGNATIONS
   - CG Compatibility Group: 20; Alcohols, glycols
   - DOT ID No.: 1148
   - CAS Registry No.: 123-42-2
   - NAERSI Guide No.: 129
   - Standard Industrial Trade Classification: DAA 51229

3. HEALTH HAZARDS
   - Personal Protective Equipment: Air-pak or organic canister, rubber gloves, goggles.
   - Symptoms Following Exposure: Vapors is irritating to the mucous membranes of the eye and respiratory tract. Inhalation can cause dimness, nausea, some anestheisia. Very high concentrations have a narcotic effect. The liquid is not highly irritating to the skin but can cause dermatitis.
   - Treatment of Exposure: EVACUATION: remove victim to fresh air. Give artificial respiration if breathing has stopped. CONTACT WITH EYES OR SKIN: wash affected skin areas with water; flush eyes with water and get medical care if discomfort persists.
   - TLV-TWA: 50 ppm
   - TLV-STEL: Not listed
   - TLV-Ceiling: Not listed
   - Toxicity by Ingestion: Grade 2; LD50 = 0.5 to 5 g/kg (rat)
   - Toxicity by Inhalation: Currently not available
   - Chronic Toxicity: Currently not available
   - Vapor (Gas) Irritant Characteristics: Vapors cause moderate irritation such that personnel will find high concentrations unpleasant. The effect is temporary.
   - Liquid or Solid Characteristics: Minimum hazard. If spilled on clothing and allowed to remain, may cause smearing and reddening of the skin.
   - Odor Threshold: Currently not available
   - IDLH Value: 1,800 ppm
   - OSHA PEL-TWA: 50 ppm
   - OSHA PEL-STEL: Not listed
   - OSHA PEL-Ceiling: Not listed
   - EPA AEG: Not listed

4. FIRE HAZARDS
   - Flash Point: 142°F O.C. 125°F C.C.
   - Flammable Limits in Air: 1.8%-6.9%
   - Flammable Extinguishing Agents: Dry chemical, alcohol foam, carbon dioxide
   - Special Hazards of Combustion Products: Not pertinent
   - Behavior in Fire: Not pertinent
   - Auto Ignition Temperature: 1118°F
   - Electrical Hazards: Not pertinent
   - Burning Rate: Currently not available
   - Adiabatic Flame Temperature: Currently not available
   - Stoichometric Air to Fuel Ratio: 38.1 (calc.)
   - Combustion Molar Ratio (Reactant to Product): 12.0 (calc.)
   - Minimum Oxygen Concentration for Reaction: None
   - Pressures of Combustion Reaction: None
   - Inhibitor of Polymerization: Not pertinent

5. CHEMICAL REACTIVITY
   - Reactivity with Water: No reaction
   - Reactivity with Common Materials: No reaction
   - Stability During Transport: Stable
   - Neutralizing Agents for Acids and Caustics: None
   - Polymerization: Not pertinent
   - Inhibitor of Polymerization: Not pertinent

6. WATER POLLUTION
   - Aquatic Toxicity: Currently not available
   - Waterfowl Toxicity: Currently not available
   - Biological Oxygen Demand (BOD): Currently not available
   - Food Chain Concentration Potential: None
   - GESAMP Hazard Profile: Bioaccumulation: 0
   - Damages to living resources: 1
   - Human Oral hazard: 1
   - Human Contact hazard: 1
   - Reduction of amenities: X

7. SHIPPING INFORMATION
   - Grades of Purify: 99.9%
   - Storage Temperature: Ambient
   - Inert Atmosphere: No requirement
   - Venting: Open (flame arrestor)
   - IMO Pollution Category: D
   - Ship Type: Data not available
   - Bale Hull Type: Currently not available

8. HAZARD CLASSIFICATIONS
   - CFR Category: Flammable liquid
   - CFR Class: 3
   - CFR Package Group: II
   - Marine Pollutant: No
   - EPA Hazard Classification: Category Classification
   - Health Hazard (Blue): 1
   - Flammability (Red): 2
   - Instability (Yellow): 0
   - EPA Reportable Quantity: Not listed
   - EPA Pollution Category: Not listed
   - RODA Waste Number: Not listed
   - EPA FWPCA List: Not listed

9. PHYSICAL & CHEMICAL PROPERTIES
   - Physical State at 15°C and 1 atm: Liquid
   - Molecular Weight: 116.16
   - Boiling Point at 1 atm: 328°F = 164.4°C = 437.4 K
   - Freezing Point: –45.0°F = –42.8°C = 294.4 K
   - Critical Temperature: 633.2°F = 334°C = 607.2 K
   - Critical Pressure: 380 psia = 26 atm = 3.6 Mpsi
   - Specific Gravity: 0.938 at 20°C (liquid)
   - Surface Tension: Not pertinent
   - Interfaceal Tension: Not pertinent
   - Vapor (Gas) Specific Gravity: 4.8
   - Ratio of Specific Heats of Vapor (Gas): 1.25
   - Latent Heat of Vaporization: 150 Btu/lb = 85 kcall = 3.6 X 10^-6 J/kg
   - Heat of Combustion: (ad.) = 13,000 Btu/lb = 7.250 kcall = 330 X 10^-6 J/kg
   - Heat of Decomposition: Not pertinent
   - Heat of Solution: Not pertinent
   - Heat of Polymerization: Not pertinent
   - Heat of Fusion: Currently not available
   - Limiting Value: Currently not available
   - Reid Vapor Pressure: 0.07 psia

NOTES

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